

REMARKS

Claims 1 to 3, 5 to 8, 10 to 23, 25 to 27, and 29 to 46 remain pending. Claims 35 and 37 to 42 have been withdrawn. Claims 47 and 48 have been added.

Claims 5, 10, 11, 34 and 36 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. The Action stated that claim 5 depends on cancelled claim 4 and that claims 10 and 11 depend on cancelled claim 9.

The rejection of claims 5, 10, 11, 34 and 36 under 35 U.S.C. 112, second paragraph, is overcome in view of the amendments to the claim dependencies of claims 5, 10, and 11.

Claims 1 to 3, 5 to 8, 10 to 12, 16, 26, 27, 34, and 44 have been rejected under 35 U.S.C. 102(b) as anticipated by, or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 3,303,091 to Mailander et al. (the Mailander patent). The Action stated that the Mailander patent disclosed 5% insecticide (DEET), 35% water, 25% propellant, alcohols (menthol, propylene glycol) in small amounts, and non-VOC (esters).

With respect to the anticipation rejection under 35 USC 102(b), the statute requires that a prior art patent describe the claimed invention:

"A person shall be entitled to a patent unless... (b) the invention was described in a printed publication in this ... country ... more than one year prior to the date of the application for a patent in the United States..."

As used in Section 102, "described" has a particular meaning. According to M.P.E.P. § 2131, a prior art reference describes a claim of an application only if each and every element as set forth in the main claim and every claim is found, either expressly or inherently, in a single reference. This requires much more than finding each and every element in a prior art reference as the Office has attempted to do here; "The identical invention must be shown in as complete detail as is contained in the ... claim." See M.P.E.P. § 2131 (quoting *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989)). The reference must direct those skilled in the art to the presently claimed invention without any need for picking, choosing, and combining various disclosures in the reference not directly related to each other by the teachings of the cited reference. See *In re Arkley*, 172 U.S.P.Q. 524 (C.C.P.A. 1972); see also M.P.E.P. § 706.02(a) ("For anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly.") Here, Mailander fails to describe each and every element of claim 1 and every claim.

In particular, independent claim 1 of the present invention requires the presence of about 1 to about 45 wt.% (based on composition weight) of an alcohol of 1 to 8 carbons atoms as part of the volatile organic compound (VOC) component. In contrast, the Mailander patent does not disclose or suggest the presence of an alcohol, let alone in a particular amount as required by claim 1. In fact, the Mailander patent teaches away from using an alcohol. Col. 10, lines 26 to 37 teaches that alcohols are known de-emulsifiers and cause emulsions to break up.

The Action erroneously states that menthol and propylene glycol are alcohols present in small amounts in the compositions of the Mailander patent. The assertion in the Action that

menthol is an alcohol of the present invention is not well taken since menthol has 10 carbons and the claimed alcohol must have 1 to 8 carbons. The assertion in the Action that propylene glycol is an alcohol of the volatile organic compound (VOC) component is likewise not well taken since propylene glycol is specifically disclosed in the specification at page 6, line 2 as being a non-VOC component, and is well-known by all skilled in the art as being a non-volatile organic compound. As Mailander fails to disclose or suggest a volatile organic compound (VOC) component having about 1 to about 45 wt.% of an alcohol of 1 to 8 carbon atoms, Mailander fails to anticipate the claims of the present invention, as it fails to teach each and every element of the claimed invention.

Additionally, independent claim 1 of the present invention requires that the composition be a solution, suspension, or dispersion. In contrast, Mailander discloses only an emulsion (see col. 1, line 11; col. 3, lines 67 to 73, and claim 1 from which claim 2 cited by the Examiner depends). Mailander discloses the emulsion form as being critical to the stability and efficacy of the disclosed composition (col. 3, lines 58 to 65 and col. 10, lines 29 to 42). An emulsion is a different composition form than a solution, suspension, or dispersion, which differ fundamentally in composition and structure compared to an emulsion. The solution, suspension, or dispersion form enables the composition to be dispensed in the form of an atomized spray for even distribution of the product to human skin. Emulsions that contain surface active agents, dispense from aerosol containers in the form of a foam, e.g., a mousse, that requires further application by the free hand. Moreover, foams are disposed to break apart, with the result that less than the total effect of the product can be obtained. The present invention avoids such difficulties and provides an atomized

aerosol spray that is easily evenly applied to the skin. As Mailander fails to disclose a solution, suspension or dispersion, it fails to anticipate the claims of the present invention for this reason too.

From the foregoing, it is apparent that the present invention claims features not disclosed in the Mailander patent. Thus, the present invention is novel over the Mailander patent, as the Mailander patent fails to teach each and every element of the claimed invention.

With respect to the obviousness rejection under 35 USC 103(a), the Office has the initial burden, according to M.P.E.P. § 2143, to establish a *prima facie* case of obviousness by pointing to three (3) basic criteria, all of which are relevant here. Applicants respectfully submit that a *prima facie* case of obviousness has not been established for the reasons set forth below.

There must be some suggestion or motivation, either in the prior art or in the knowledge generally available to one of ordinary skill in the art, to modify the teachings of the prior art (see M.P.E.P. § 2141). The Office has not set forth a factual basis for motivation to modify the teaching of Mailander to have a chance of reaching the claimed invention.

The Mailander patent cannot suggest a solution, suspension, or dispersion when the emulsion form is disclosed therein as being a critical feature of the invention. The present invention avoids the difficulties of an emulsion, as stated above, and provides an atomized aerosol spray that is easily and evenly applied to the skin. Moreover, the Mailander patent cannot suggest the use of an alcohol as part of the volatile organic

compound (VOC) component when it does not disclose an alcohol as part of the volatile organic compound (VOC) component and expressly teaches away from its use, let alone in a particular amount. Col. 10, lines 26 to 37 teaches that alcohols are known de-emulsifiers and cause emulsions to break up. Since the compositions of the Mailander patent are emulsion compositions (col. 1, lines 11 and 12 and col. 3, lines 67 to 73), the use or presence of alcohols is untenable.

Accordingly, Mailander fails to teach or suggest any obvious use of an aerosol insect repellent composition in the form of a solution, suspension or dispersion with a volatile organic compound (VOC) component having about 1 to 45 wt.% of an alcohol of 1 to 8 carbon atoms.

For the foregoing reasons, the withdrawal of Mailander is respectfully requested.

Claims 1 to 3, 5 to 8, 10 to 23, 25 to 27, 29 to 34, 43, and 44 have been rejected under 35 U.S.C. 102(b) as anticipated by, or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 4,970,220 to Chausee (the Chausee patent) for reasons of record.

With respect to the anticipation rejection under 35 USC 102(b), independent claim 1 requires an insect repellent composition having about 1 to about 30 wt.% of a propellant and water in an amount up to about 50 wt.%. The Chausee patent does not disclose or suggest an insect repellent composition having a propellant and water in an amount up to about 50 wt%. By way of example, the Chausee patent discloses aerosol shave creams (Ex. VII), aerosol pump sprays (Ex. XIII), and insect repellent lotions (Ex. XVIII). The two compositions of the aerosol shave

creams of Example VII (Compositions M' and N') have water concentrations of 85.5 and 74.575 wt.% respectively, that are clearly in excess of the up to about 50 wt.% limit required by claim 1 of the present invention. Moreover, the shave creams fail to anticipate the insect repellent requirement of the present invention. Although the Compositions Y and Z of Example XIII are disclosed as aerosol pump sprays, they are not true "aerosols", i.e., compositions having a propellant. Accordingly, the pump sprays of Example XIII fail to anticipate the propellant requirement of the present invention. Furthermore, their water concentrations are 70 wt.%, in excess of the up to about 50 wt.% required by the claims of the present invention.

The insect repellent lotions of Example XVIII similarly fail to anticipate compositions containing the required propellant of the present invention. Moreover, Compositions R-1 and R-2 of Example XVIII are lotions that have an aqueous phase, an oil and sufficient surfactant to emulsify the phase to form the lotion compositions.

In summary, there is no clear and unambiguous disclosure, either in the working examples or elsewhere, in the Chausee patent of an insect repellent composition having a propellant and water in an amount up to about 50 wt%. Thus, the Chausee patent fails to anticipate the claims of the present invention as it fails to teach each and every element of the claimed invention.

With respect to the obviousness rejection under 35 USC 103(a), obviousness would require i) selection of an insect repellent from a long list of optional, non-required ingredients in col. 8, lines 22 to 39; ii) selection of an amount of insect repellent within the required about 0.5 to about 50 wt.% range; iii) selection of a VOC component having a propellant even though

a propellant is an optional, non-required ingredient in the Chaussee patent; iv) selection of an amount of propellant within the required about 1 to about 30 wt.% range even though a propellant is an optional, non-required ingredient in the Chaussee patent; v) selection of a VOC component having an alcohol even though alcohol is an optional, non-required ingredient in the Chaussee patent; vi) selection of an amount of alcohol within the required about 1 to about 45 wt.% range even though alcohol is an optional, non-required ingredient in the Chaussee patent; vii) selection of a non-VOC component having water at up to about 50 wt.% when the Chausee patent does not require or even suggest such a limit; viii) selection of an amount of the VOC component, including the amount of the propellant plus the amount of the alcohol, not greater than about 55 wt.%; and ix) selection of a composition form from a solution, suspension, or dispersion when the Chausee patent places no limitation on the form of the product, ie, every product form is deemed equally viable. As set forth above, nine levels of selection are required to obtain the invention of claim 1 from the disclosure of in the Chaussee patent. It is apparent that any finding that claim 1 is obvious in view of the Chausee patent is farfetched indeed.

For the foregoing reasons, the withdrawal of Chausee is respectfully requested.

Claims 1, 5 to 8, 10 to 12, 16 to 19, 26, 27, 32 to 34, 43, and 44 have been rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,145,604 to Neumiller (the Neumiller patent) for reasons of record.

With respect to this anticipation rejection, independent claim 1 requires that the composition be a solution, suspension,

or dispersion. In contrast, Neumiller discloses only an emulsion containing vesicular structures (see abstract and col. 3, lines 26 to 28). An emulsion in a vesicular structure is a lamellar or liquid crystal system, which is a very different composition form than a solution, suspension, or dispersion.

The solution, dispersion, or suspension form of composition is an important feature of the present invention, as it enables the composition to be dispensed as an atomized spray. Such form is important for even distribution of the product to human skin. Emulsion products, which contain surface active agents, dispense from aerosol containers in the form of a foam, i.e., a mousse, that requires further application by the free hand. Moreover, foams are disposed to break apart, with the result that less than the total effect of the product can be obtained. The present invention avoids such difficulties and provides an atomized aerosol spray that is easily and evenly applied to the skin. As Neumiller fails to disclose a solution, suspension or dispersion, it fails to anticipate the claims of the present invention, as it fails to disclose each and every element of the claimed invention.

Additionally, independent claim 1 of the present invention also requires that the composition have a VOC component having about 1 to about 45 wt.% of an alcohol of 1 to 8 carbons atoms, and a non-VOC component having water up to about 50 wt.% (based on composition weight). In contrast, the emulsions containing vesicular structures disclosed in Neumiller do not have a VOC component having about 1 to about 45 wt.% of an alcohol of 1 to 8 carbon atoms, and have water concentrations well in excess of about 50 wt.%. Reasons supporting this point of distinction are as set forth in the Amendment dated February 27, 2004.

Accordingly, Neumiller fails to anticipate the claims of the present invention for this reason too.

For the foregoing reasons, the withdrawal of Neumiller is respectfully requested.

Claims 1, 5 to 8, 10 to 12, 16 to 19, 26, 27, 29, 30, 34, and 43 to 46 have been rejected under 35 U.S.C. 102(b) as anticipated by the Mailander patent and U.S. 5,055,299 to Dohara et al. (the Dohara patent). The Action states that the Mailander patent and the Dohara patent provide the essence of the instant compositions absent ingredients not used on human skin. The Action also states that both the Mailander patent and the Dohara patent disclose pyrethrins and that the Mailander patent discloses DEET as equivalent to pyrethrins. The Action further states that the Dohara patent utilizes the instant alcohols. The Action still further states that it was obvious to utilize the DEET of the Mailander patent and the small amount of alcohol of the Dohara patent along with water and propellant substitution to achieve an optimized aerosol insect repellent composition.

Since obviousness was discussed extensively in the basis for the foregoing rejection and a combination of references was employed, the characterization in the first sentence thereof as being under 35 U.S.C. 102(b) appears to be erroneous. Applicants will respond to the rejection as if it were made under 35 U.S.C. 103(a).

The rejection of claims 1, 5 to 8, 10 to 12, 16 to 19, 26, 27, 29, 30, 34, and 43 to 46 under 35 U.S.C. 103(a) over the combination of the Mailander patent and the Dohara patent is not well taken because this combination is not suggested by their teachings. As discussed above, the Mailander patent discloses

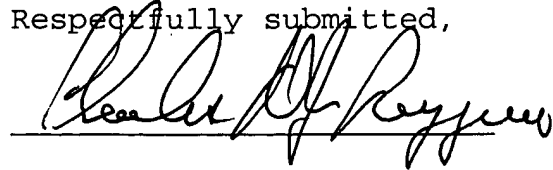
emulsions only, which are not covered by the claims of the present invention. The composition forms of Dohara et al., however, cannot be substituted for the emulsions of the Mailander patent because the Mailander patent specifically teaches away from any composition form other than emulsions (as previously discussed). Thus, the reference combination of the Mailander patent and Dohara et al. is not suggested. The Action also states that it is obvious to use the alcohol of Dohara et al. in the emulsions of the Mailander patent. As previously discussed, however, using any alcohol in the emulsions of the Mailander patent is not possible because the Mailander patent teaches that alcohols are destabilizing. Thus, the reference combination of the Mailander patent and Dohara et al. is further not suggested.

If the Examiner intended to cite Dohara as anticipatory under 35 USC 102(b), Applicants would respectfully point out that Dohara is specific to pyrethroid compounds, which are not part of Applicant's claimed insect repellent compounds. Accordingly, Dohara fails to anticipate the claims of the present invention and fails to render obvious the present invention, either alone or in combination with Mailander.

For the foregoing reasons, the withdrawal of Dohara is respectfully requested.

Reconsideration of claims 1 to 3, 5 to 8, 10 to 23, 25 to 27, and 29 to 46 is deemed warranted in view of the foregoing, and allowance of said claims and new claims 47 and 48 is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Charles N. J. Ruggiero", is written over a horizontal line.

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